United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,277	02/28/2002	Sanjay Kaluskar	264/237	2046
22249	7590 06/07/2004		EXAM	INER
LYON & LY	*		CORRIELU	S, JEAN M
633 WEST FI SUITE 4700	FTH STREET		ART UNIT	PAPER NUMBER
LOS ANGEL	ES, CA 90071		2172	<u> </u>
			DATE MAILED: 06/07/2004	3

Please find below and/or attached an Office communication concerning this application or proceeding.

RECEIVED

JUN 1 8 2004

Technology Center 2100

d

3 : 34

·	Application No.	Applicant(s)
	10/086,277	KALUSKAR ET AL.
Office Action Summary	Examiner	Art Unit
	Jean M Corrielus	2172
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 28 Fe	bruary 2002.	
	action is non-final.	
3) Since this application is in condition for allowan	ce except for formal matters, pro	secution as to the merits is
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.
Disposition of Claims		
4) Claim(s) is/are pending in the application	n.	
4a) Of the above claim(s) is/are withdraw		
5) Claim(s) is/are allowed.		
6) Claim(s) <u>1,4,5,8-13,16,17,20-22,27,32,33,36,33</u>	7,40-44,48,50-58,62,63,67 and 6	<u>8</u> is/are rejected.
7) Claim(s) <u>2,3,6,7,14,15,18,19,23-26,28-31,34,35</u>	5,38,39,45-47,49,59-61 and 64-6	<u>∕6</u> is/are objected to.
8) Claim(s) are subject to restriction and/or	election requirement.	
Application Papers	·	
9)☐ The specification is objected to by the Examiner		
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the E	Examiner.
Applicant may not request that any objection to the o	Irawing(s) be held in abeyance. See	e 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correcti		• •
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority 	have been received have been received in Application	on No
application from the International Bureau	(PCT Rule 17.2(a)).	·
* See the attached detailed Office action for a list of	of the certified copies not receive	d.
Attachment(s)	_	
I) ⊠ Notice of References Cited (PTO-892) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)	
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/2/04.		atent Application (PTO-152)
· · · · · · · · · · · · · · · · · · ·	, 	



Art Unit: 2172

DETAILED ACTION

1. This office action is in response to the application filed February 28, 2002, in which claims 1-68 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement filed February 2, 2004 complies with the provisions of 37 CFR 1.97 and MPEP § 609. It has been placed in the application file. The information referred to therein has been considered as to the merits.

Drawings

3. Applicants are required to furnish the formal drawings in response this office action. No new matter may be introduced in the required drawing. Failure to timely submit a drawing will result in **ABANDONMENT** of the application.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any



Art Unit: 2172

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 4-5, 8-13, 16-17, 20-22, 27, 32, 33, 36, 37, 40-44, 48, 50-58, 62-63 and 67-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al., (hereinafter "Chow") US Patent no. 5,875,334.

As to claim 1, Chow discloses the claimed "receiving a database statement from a client" by means of receive a query statement from a user (col.1, lines 63-67); and "searching memory for a similar database statement" by comparing the SQL3 control statements (col.2, lines 25-29; col.10, lines 54-67), wherein the REPEAT statements is similar to WHILE statements (col.12, lines 23-48). Chow does not explicitly disclose the use of reusing a data structure compiled for said similar database statement to execute said database statement when a system parameter is configured to control data structure sharing. However, Chow discloses a V2 compiler, where the declaration and reference of a cursor is processed in a way which involves the collaboration between the pre-processor and SQL compiler is setup to control data structure sharing (col.7, lines 50-67; col.32, lines 4-15; col.42, lines 13-52). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Show's system wherein the plan optimizer, provided therein (items 116 of fig.1) would incorporate the use of reusing a data structure compiled for said similar database statement to execute said database statement when a system parameter is configured to control data structure sharing because that



Donard Namber: 10/000,2/

Art Unit: 2172

would provide Chow's system the enhanced capability of compiling query statements and control statements while still enabling and enhancing the efficiency of the system.

As to claim 4, Chow discloses the claimed "wherein reusing a data structure compiled for said similar database statement occurs when a command line parameter is configured to control data structure sharing" (col.6, lines 25-36; col.23, lines 36-67).

As to claim 5, Chow discloses the claimed "wherein the command line parameter is a hint for enabling a one-time system parameter override" (col.7, lines 50-67).

As to claim 8, Chow discloses the claimed "returning a result set to the client if said database statement is a query" (col.39, lines 35-45).

As to claim 9, Chow discloses the claimed "wherein reusing a data structure includes executing the execution plan compiled from said similar database statement" (col.23, lines 35-65).

As to claim 10, Chow discloses the claimed "wherein said data structure a cursor" (col.42, lines 14-34).

As to claim 11, Chow discloses the claimed "wherein said database statement and said similar database statement are SQL statement" (col.23, lines 35-65).

Art Unit: 2172

As to claims 12-13, 16-17 and 20-21, the limitations of claims 12-13, 16-17 and 20-21 have been mentioned in the rejection of claims 1, 4-5 and 8-11 above. They are therefore, rejected under the same rationale.

As to claims 22, 27, 32-33, 36-37 and 40-43, the limitations of claims 22, 27, 32-33, 36-37 and 40-43 have been mentioned in the rejection of claims 1, 4 and 8-11 above. They are therefore, rejected under the same rationale.

As to claims 44, 48 and 50-57, the limitations of claims 44, 48 and 50-57 have been mentioned in the rejection of claims 1, 4 and 8-11 above. They are therefore, rejected under the same rationale. In addition, Chow discloses the claimed "a parser for hard parsing the database statement" (col.); "building an expression tree from the database" (col.); and "a syntactic analyzer" (col.7, line 66-col.8, line 7).

As to claims 58, 62 and 67-68, the limitations of claims 58, 62 and 67-68 have been mentioned in the rejection of claims 1, 4 and 8-11 above. They are therefore, rejected under the same rationale.

Allowable Subject Matter

7. Claims 2-3, 6-7, 14-15, 18-19, 23-26, 28-31, 34-35, 38-39, 45-47, 49, 59-61 and 64-66 are objected to as being dependent upon a rejected base claim, but would be allowable if

Art Unit: 2172

rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (703) 306-3035. The examiner can normally be reached on Monday - Friday (12:00pm - 7:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jean M. Corrielus

Patent Examiner

May 31, 2004

FEB 0 2 2004

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

no persons are required to respond to a collection of information unless it contains a valid OMB control number.

ork Reduction Act o Substitute for form 1449A PRABEN

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet of 3

•	Complete if Known		
Application Number	10/086,277	RECE	MED
Filing Date	February 28, 2002	TILUL	
First Named Inventor	Sanjay Kaluskar	FEB 0	5 2004
Art Unit	2171	1 20 0	2004
Examiner Name	Not yet assigned	Technology (hanter 2100
Attorney Docket Number	264/237	Lecinology	Deliter 7 190

			U.S. PATENT D	OCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant
Initials	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear
7/12	1	6,615,206	9/2/2003	Jakobsson et al.	
Marie Contraction of the Contrac	2	6,606,627	8/12/2003	Guthrie et al.	
7	3	6,581,055	6/17/2003	Ziauddin et al.	
	4	6,546,394	4/8/2003	Chong et al.	
	5	6,505,227	1/7/2003	Mirchandaney et al.	
	6	6,470,423	10/22/2002	Ho et al.	
	7	6,439,783	8/27/2002	Antoshenkov	
	8	6,421,662	7/16/2002	Karten	
	9	6,401,083	6/4/2002	Agarwal et al.	
	10	6,374,257	4/16/2002	Guay et al.	
	11	6,370,619	4/9/2002	Ho et al.	
	12	6,370,522	4/9/2002	Agarwal et al.	
	13	6,351,742	2/26/2002	Agarwal et al.	
	14	6,144,957	11/7/2000	Cohen et al.	
	15	6,029,163	2/22/2000	Ziauddin	
	16	6,026,391	2/15/2000	Osborn et al.	
	17	6,014,656	1/11/2000	Hallmark et al.	
	18	5,974,408	10/26/1999	Cohen et al.	
	19	5,956,705	9/21/1999	Stevens et al.	
1	20	5,907,844	5/25/1999	Guay et al.	

		FOREIGN PA	TENT DOCU	MENTS		
Examiner	Cite	Foreign Patent Document	D. Misseline	Name of Patentee or	Pages, Columns, Lines,	
Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T⁵
						<u> </u>
		· · · · · · · · · · · · · · · · · · ·	-	-		
		-				
					· · · · · · · · · · · · · · · · · · ·	

Examiner Signature	Pean	Corne lus	Date Considered	5/39/04	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Under the aperwork Reduction Agro 19
Substitute for form 14437/2/TO

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

2 of 3

Sheet

	Complete if Known	
Application Number	10/086,277	
Filing Date	February 28, 2002	
First Named Inventor	Sanjay Kaluskar	
Art Unit	2171 F.E.	B 0 5 1004
Examiner Name	Not yet assigned	
Attorney Docket Number	264/237 IECNNOI	ogy Cepter 210(

			U.S. PATENT D	OCUMENTS	_
Examiner Initials *	Cite No.1	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear
M	21	5,903,888	5/11/1999	Cohen et al.	
1	22	5,899,993	5/4/1999	Jenkins, Jr.	
	23	5,899,986	5/4/1999	Ziauddin	-
	24	5,892,945	4/6/1999	Mirchandaney et al.	
	25	5,857,180	1/5/1999	Hallmark et al.	
7	26	5,822,748	10/13/1998	Cohen et al.	
	27	5,819,251	10/6/1998	Kremer et al.	
1 —	28	5,802,523	9/1/1998	Jasuja et al.	
1	29	5,802,521	9/1/1998	Ziauddin et al.	
	30	5,761,654	6/2/1998	Tow	
1	31	5,664,172	9/2/1997	Antoshenkov	
1	32	5,495,608	2/27/1996	Antoshenkov	
	33	5,412,804	5/2/1995	Krishna	
T	34	5,404,510	4/4/1995	Smith et al.	
Π,					
IJ					

	FOREIGN PATENT DOCUMENTS								
Examiner Cite Foreign Patent Document Publication Name of Patentee or Where Relevant Where Relevant									
Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁸			
	L								

Correction to the second

*EXAMINER: Initial inference considered, whether or not citation is in conformance with MPEP 609. Draw line phrough citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

FEB 0 2 2004 Paperwork Reduction Substitute for form 14498/77 Page

PTO/SB/08b(08-03) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE ct of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

Complete if Known Application Number 10/086.277 Filing Date February 28, 2002 First Named Inventor Sanjay Kaluskar Art Unit 2171 Examiner Name Not yet assigned Attorney Docket Number 264/237 Technology Center 2100

Examiner initials* Cite No. Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. LEVERENZ, LEFTY et al., Oracle8 Server Concepts, 1997, pp. 13-1 to 13-19 and 19-1 to 19-68.	T 2
LEVERENZ, LEFTY et al. Oracle8 Server Concepts, 1997, pp. 13-1 to 13-19 and 19-1 to 19-68	
	ļ
	<u> </u>
	_
	-
	-

Examiner Signature	Low	Carre	lun	Date Considered	Hay	28	2004	
	À.							

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

^{*}EXAMINER: Initial it reference considered, whether or not citation is in conformance with MPEP 609. Draw. Ine through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Notice of References Cited

Application/Control No. 10/086,277	Applicant(s)/Patent Under Reexamination KALUSKAR ET AL.		
Examiner	Art Unit		
Jean M Corrielus	2172	Page 1 of 1	

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-5,875,334	02-1999	Chow et al.	717/141
	В	US-6,457,007	09-2002	Kikuchi et al.	707/10
	С	US-6,269,373	07-2001	Apte et al.	707/10
	D	US-6,598,041	07-2003	Bernal et al.	707/3
	Е	US-6,643,637	11-2003	Chen et al.	707/2
	F	US-6,694,305	02-2004	Bernal et al.	707/2
	G	US-6,665,678	12-2003	Ching Chen et al.	707/100
	Н	US-6,721,731	04-2004	Cornwell et al.	707/3
	ı	US-5,758,144	05-1998	Eberhard et al.	707/2
	J	US-5,734,884	03-1998	Eberhard et al.	707/2
	к	US-5,963,742	10-1999	Williams, Gerald S.	717/143
	L	US-5,615,359	03-1997	Yung, Alex	707/10
	м	US-			,

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	0					
	Р					
	ď					
	R					
	S			_		
	Т					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	J	
	٧	·
	8	
	X	in reference in not being furnished with this Office action (Co. MDED 5.707.05(a))

y of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

n MM-YYYY format are publication dates. Classifications may be US or foreign.

ot and Trademark Office (Rev. 01-2001)

U.S. DEPARTMENT OF COMMERCE
COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VA-22313, 1430
FUNDEUTVERABLE RETURNIN TEN DAYS

🗼 ÁN EQUAL OPPOF

OF

OF

DE TITLE PRINTED U.S. POSTAGE

U.S. OFFICIAL MAIL.

PRINTED

E 17251870 U.S. POSTAGE